



HWS-G_CNMR-E

ESTIA DOMESTIC HOT WATER HEAT PUMP



The Toshiba DHW-HP is designed to provide the customer with best in class performance and energy savings, for sanitary hot water production, throughout the year. Thanks to its large operating range, high external static pressure fan and low noise operation the Toshiba DHW-HP is suitable for all types of installation.

Comfort & ease of installation

Sanitary hot water can be produced throughout the year, using only the heat pump, thanks to the innovative design of the unit and the large operating temperature range (Air -7°C to $+40^{\circ}\text{C}$). Installation is simplified due to the slimline chassis design ($\varnothing 603\text{mm}$) and easy access water pipe connections.

Highest efficiency for best energy savings

The Toshiba DHW-HP provides 80% energy savings Vs traditional electric water heaters with best in class COP 3.69 (EN16147 LCIE certified). Compatible with solar systems (photovoltaic panels ready or solar built-in extra coil), and smart grid ready, makes it the best solution for increased energy savings.

Innovative & reliable

Anti-corrosion protection with Enamelled steel tank and magnesium anode. Back-up electrical heater to secure hot water production at any time.

Intuitive & Adaptive control

User friendly control with 5 operational modes AUTO, ECO, BOOST, SILENT and HOLIDAY. Flexible control solutions: Low electricity tariff mode, energy consumption display, Modbus connectivity, Air Cooling function & Floor Heating function with extra coil.

COP MAX



3.69

OPERATION

 $-7^{\circ}\text{C} > +40^{\circ}\text{C}$

HOT WATER

Up to 65°C

Best in class performances:

- Energy class A+ (ErP 2017)
- Heat pump hot water production from -7°C to $+40^{\circ}\text{C}$ outside air temperature
- Hot water temperature to 60°C without the use of electric heaters
- Adjustable airflow rate (0-800m³/h)
- Best in class fan external static pressure (up to 200Pa)
- Low noise operation
- Slimline chassis design ($\varnothing 603\text{mm}$)
- Flexible control options including Modbus connectivity
- Compatible with other renewable technologies solar thermal and solar photovoltaic (advanced option only)
- Smart Grid Ready (advanced option only)



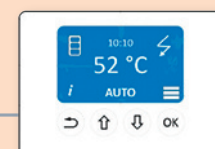
DHW-HP UNITS

HWS-G190
HWS-G260



REMOTE CONTROLS

DHW-HP
Control panel



ESTIA DOMESTIC HOT WATER HEAT PUMP Performance data

Domestic Hot Water Heat Pump		HWS-G1901CNMR-E	HWS-G2601CNMR-E
Energy Class	Label	A+	A+
COP at Air7°C W10°C-52,9°C (EN16147)		3,57	3,69
Heat pump operating range (min/max)	°C	-7 / +40	-7 / +40
Heat up time (A7°C W10°C-53,5°C)	hr:mm	06:27	09:12
Maximum quantity of usable hot water Vmax 40 volume (W52.9°C)	liters	247	347
Cylinder volume	liters	190	260
Cylinder profile		L	XL
Maximum water temperature (heat pump & elect.heater)	°C	65	65
Maximum water temperature (heat pump only)	°C	60	60
Corrosion protection		Magnesium anode	Magnesium anode
Noise power level - Ducted (ISO12102)	dB(A)	49.0	49.0
Noise pressure level @2m - Ducted	dB(A)	32.0	32.0
Noise power level - Non ducted (ISO12102)	dB(A)	55.6	55.6
Noise pressure level @2m - Non ducted	dB(A)	38.6	38.6
Airflow rate nominal (min - max)	m³/h	450 (0 - 800)	450 (0 - 800)
Maximum fan power	W	85	85
Maximum external static pressure	Pa	200	200
Air duct connections	mm	160	160
Minimum room volume (non ducted unit)	m³	60	60
Maximum power input	W	2185	2185
Electrical heater power	W	1500	1500
Maximum compressor power	W	600	600
Auxiliary power input (Paux)	W	1.61	1.61
Standby power input (Pes)	W	17	20

ESTIA DOMESTIC HOT WATER HEAT PUMP Physical data

Domestic Hot Water Heat Pump		HWS-G1901CNMR-E	HWS-G2601CNMR-E
Dimensions (Height x Diameter)	mm	1600 x 620	1600 x 620
Required height for installation	mm	1868	2223
Weight (dry / wet)	kg	94 / 284	100/350
Refrigerant		R134A	R134A
Refrigerant charge	kg	1.2	1.28
Refrigerant charge CO₂ equivalent	ton	1.72	1.83
Water connections (cold & hot water)	inch	3/4	3/4
Standard water connection entry angle	deg.	45	45
Condensates water connections	mm	Diam19	Diam19
Max water side operating pressure	Mpa	0.6	0.6
Power supply	V-ph-Hz	230-1-50	230-1-50

(1) Sound pressure calculation based on spherical sound propagation and infinite room (directivity factor Q=1)

ESTIA DOMESTIC HOT WATER HEAT PUMP Product configurations

Description	Model name	Functions
190l cylinder + 180°C variant water connection position	HWS-G1901CNRR-E	Alternative water connection entry position for flexible installation
190l cylinder + deluxe PCB	HWS-G1901CNXR-E	Deluxe PCB option allowing connection of: - Solar Photovoltaic - Smart Grid Ready - Additional pump / ventilation damper
190l cylinder + deluxe PCB + heating coil	HWS-G1901ENXR-E	All of the features of the deluxe PCB option with the additional benefit of connection to a solar thermal system
260l cylinder + 180°C variant water connection position	HWS-G2601CNRR-E	Alternative water connection entry position for flexible installation
260l cylinder + deluxe PCB	HWS-G2601CNXR-E	Deluxe PCB option allowing connection of: - Solar Photovoltaic - Smart Grid Ready - Additional pump / ventilation damper
260l cylinder + deluxe PCB + heating coil	HWS-G2601ENXR-E	All of the features of the deluxe PCB option with the additional benefit of connection to a solar thermal system